PLANT AND LIGHT INVESTIGATION

AIM:

INDEPENDENT VARIABLE		DEPENDENT VARIABLE	

WHAT SAMPLES ARE WE TESTING?

ACCURATE MEASUREMENTS OF VARIABLES (IV, DV)

VALIDITY: HOW TO CONTROL OTHER VARIABLES

Variable	How you kept it the same

RELIABILITY: CONSISTENT TRIALS

EQUIPMENT DIAGRAM/NOTES

LIVEWORKSHEETS

METHOD



DATA COLLECTION

CONCLUSION

LIVEWORKSHEETS

Copy or cut out the following things and glue them into the right part of your investigation worksheet.

White
Blue
Green
Red
No light

1. Collect 15 radish plants and water them with 10 mL of water.
2. Measure the starting height of all the plants.
3. Place 3 plants into their own separate closet, make sure all closets are at the same temperature.
4. For closet number 1, shine normal white light onto the 3 plants.
5. For closet number 2, shine blue light onto the 3 plants.
6. For closest number 3, shine green light onto the 3 plants.
7. For closet number 4, shine red light onto the 3 plants.
8. For the last closet, don't shine any light onto the 3 plants.
9. Every day for a week, water the plants again with 10 mL of water.
10. At the end of the week, measure all the final heights of the plants.
11. Substrate the starting height from the final height to see how much the plants grow over the week.

Measured the amount of water with a measuring cylinder and weighed the soil to make sure all the plants got the same resources.

To Investigate how light colour affects plant height.

Repeated the experiment 3 times.



Colour of the light

Height of the plant

Variable	How you kept it the same
Same amount of water	Each plant got the same amount of water each day.
Same type of plant.	A radish plant was used in all three experiments.
Same temperature	All plants were grown at room temperature.

Colour of light	Change of Height (cm)			
	Trial 1	Trial 2	Trial 3	Average
White	23	19	27	23
Blue	14	15	13	14
Green	5	5	5	5
Red	18	20	16	18
No light	2	3	1	2

The plants that were under the white light grew the most, where as the plants that grew the list was the one that had no light.

When ranking the coloured lights, the heights to lowest was red, blue, and then green.

LIVEWORKSHEETS